



Indiana Crop & Weather Report

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CROP REPORT FOR WEEK ENDING NOVEMBER 19

AGRICULTURAL SUMMARY

Continued rainfall and very saturated soils have further delayed harvest, according to the Indiana Field Office of USDA's National Agricultural Statistics Service. Standing water can be seen in many fields across the state after last weeks rains. Some farmers feel that they will have to wait until the ground freezes before they will be able to finish harvest. Winter wheat condition continues to decline due to the excessive moisture and cool temperatures.

FIELD CROPS REPORT

There were 2.4 days suitable for field work. Eighty-five percent of the corn acreage is now harvested compared with 99 percent for last year and 96 percent for the 5-year average. By area, 86 percent of the corn acreage has been harvested in the north, 84 percent in central region, and 83 percent in the south. Moisture content of harvested corn continues to average about 18 percent.

Ninety-four percent of the soybean acreage has been **harvested** compared with 100 percent last year and 99 percent for the 5-year average. By area, 97 percent of the soybean acreage is harvested in the north, 96 percent in the central region, and 81 percent in the south. **Moisture** content of harvested soybeans is averaging about 13 percent.

Virtually all of the **winter wheat** acreage has now been planted. Eighty-six percent of the winter wheat acreage has **emerged** compared with 99 percent for last year and 95 percent for the 5-year average.

LIVESTOCK. PASTURE AND RANGE REPORT

Pastures and feedlots across the state remain very muddy. Some livestock operations have begun to feed hay. Livestock are reported to be in mostly good condition.

CROP PROGRESS TABLE

Cron	This	Last	Last	5-Year Avg		
Crop	Week	Week	Year	Avg		
	Percent					
Corn Harvested	85	79	99	96		
Soybeans Harvested	94	91	100	99		
Winter Wheat Emerged	86	73	99	95		

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excel- lent		
	Percent						
Winter Wheat 2007	2	11	43	40	4		
Winter Wheat 2006	0	2	16	66	16		

SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

	This	Last	Last				
	Week	Week	Year				
	Percent						
Topsoil							
Very Short	0	0	1				
Short	0	1	9				
Adequate	45	61	74				
Surplus	55	38	16				
Subsoil							
Very Short	0	0	7				
Short	1	2	24				
Adequate	60	73	64				
Surplus	39	25	5				
Days Suitable	2.4	3.8	3.7				

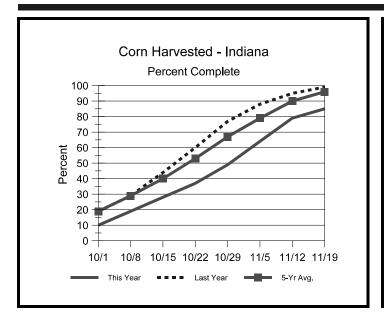
CONTACT INFORMATION

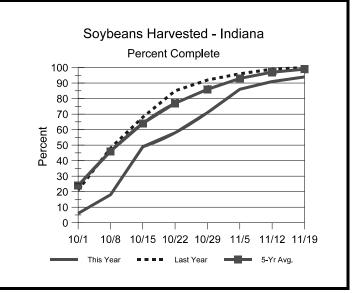
- --Greg Preston, Director
- --Andy Higgins, Agricultural Statistician

E-Mail Address: nass-in@nass.usda.gov

http://www.nass.usda.gov/Statistics_by_State/Indiana/

Crop Progress





Other Agricultural Comments And News

Asian Soybean Rust

A late arrival, but still important.

During the past couple of weeks, we found Asian soybean rust on soybean leaf samples submitted from six Indiana counties: Knox, Pike, Posey, Tippecanoe, Vanderburgh, and Warrick. The first finding for Indiana was in Knox County, and represented the northernmost detection of this disease in the U.S. A week later, the find in Tippecanoe County bested that record by more than 100 miles.

Our soybean harvest was well underway when rust showed up. Even though rains have delayed harvest, virtually all of the soybeans in the state are now mature, so there was no opportunity for the disease to damage this year's crop in Indiana. The samples on which we found rust were mainly double-crop plantings, or late maturity groups that were far behind in development.

The story of how rust reached Indiana starts in the Mississippi Delta area. The first reports of rust from this region were in late June and early July, on kudzu in Lafayette and Iberia Parishes. It was not until late July that rust was found on soybean in Louisiana, in a sentinel plot in Rapides Parish. On August 1, rust was found on both soybean and kudzu in Jefferson County, Mississippi. From mid August through September, more and more reports of rust came from Louisiana, from sentinel plots and commercial fields. In most cases, incidence of rust (the percentage of

leaves with rust) was low. Scouts found moderately severe rust in two commercial fields in late July, one near maturity and another at the R6 stage of growth.

A weather-based spore dispersal and deposition model indicated that from September 22 through 24, spores from the Delta region were carried up the Mississippi Valley into southeastern Illinois and much of Indiana. On Oct 11, Kentucky reported finding rust in three western counties, including Union County, which is just across the river from Posey County in Indiana. We asked County Educators in that area to send any soybean or kudzu leaves that were still green to the Purdue Plant & Pest Diagnostic Lab. The first sample we received was from the Southeast Purdue Ag Center in Jennings County. double-crop beans near a security light were still green. We found no rust on these. The first positive sample was from Knox County. Plant pathologists Dan Egel and Sara Hoke collected leaves from a double-crop field on the Southwest Purdue Ag Center. Close examination revealed one pustule on one leaflet. Because the first finding in each state must be confirmed by USDA-APHIS-PPQ, we sent this sample to the Systematic Botany and Mycology Laboratory in Beltsville, MD for PCR testing, and the positive test results were reported to us on October 18. The next finding was in a sample of 70 leaflets from Posey County. Again, we found rust on only one of the leaflets, but there were 17 pustules on it. In the samples from Warrick, Vanderburgh, Pike, and Tippecanoe Counties there was also only one leaflet with rust. The rusted leaflet from Pike County had 27 pustules in a close group.

(Continued on Page 4)

Weather Information Table

Week ending Sunday November 19, 2006

	Past Week Weather Summary Data					Accumulation						
	Air Temperature			Avg		April 1, 2006 thru						
Station							D	Novemb	<u>er 19</u>		FOOD	
	T	empe I	ratui	re	Preci	lp.	4 in Soil	Prec:	<u>ipitati</u>	on I	GDD Ba	ase 50°F
	Hi	Lo	Avg	DFN	Total	Days		Total	DFN	Days	Total	DFN
Northwest (1)		•	•		,	•			•	•		•
Chalmers_5W	45	29	39	-5	1.45	4		31.97	+5.48	82	3080	-147
Francesville	46	29	38	-2	1.47	5		39.02	+12.03	98	2948	+8
Valparaiso_AP_I	46	30	39	-3	0.29	3		19.20	-10.18	64	3031	+80
Wanatah	47	29	39	-2	0.76	3	43	28.63	+0.61	87	2716	-78
Winamac	45	31	39	-2	1.52	4	40	32.70	+5.71	83	2980	+40
North Central(2)												
Plymouth	45	31	39	-4	1.48	4		30.23	+2.40	92	2853	-248
South_Bend	48	32	40	-2	1.25	5		32.75	+5.36	94	3002	+97
Young_America	46	29	38	-3	1.19	3		32.74	+6.24	89	3102	+64
Northeast (3)												
Columbia_City	45	31	38	-3	0.98	3	44	30.57	+4.14	95	2788	+19
Fort_Wayne	44	34	39	-4	0.79	2		30.48	+6.39	89	3046	-8
West Central(4)												
Greencastle	49	29	39	-5	1.67	3		40.68	+10.32	87	3078	-395
Perrysville	48	30	39	-3	1.32	3	43	30.02	+1.89	86	3416	+203
Spencer_Ag	51	29	39	-4	1.50	3		39.87	+9.50	94	3286	+49
Terre_Haute_AFB	48	28	40	-4	2.01	2		29.48	+0.79	95	3506	+59
W_Lafayette_6NW	46	30	39	-3	1.62	4	42	31.76	+5.11	96	3179	+140
Central (5)								ĺ				
Eagle_Creek_AP	48	31	40	-4	1.39	3		34.28	+7.49	97	3518	+109
Greenfield	48	30	39	-4	1.63	3		42.15	+12.75	102	3148	-124
Indianapolis_AP	48	30	40	-4	1.30	3		34.14	+7.35	97	3553	+144
Indianapolis_SE	55	30	39	-5	1.29	3		34.90	+7.32	93	3116	-288
Tipton_Ag	47	28	37	-4	1.45	3	44	36.73	+9.05	98	2928	-9
<pre>East Central(6)</pre>								ĺ				
Farmland	46	29	38	-3	1.28	3	43	34.75	+8.47	99	2881	+18
New_Castle	47	29	38	-4	0.68	2		36.03	+7.73	91	2948	+11
Southwest (7)								İ				
Evansville	51	30	42	-5	1.95	3		44.71	+17.16	81	4083	+95
Freelandville	51	30	40	-5	2.28	3		30.20	+1.77	75	3699	+131
Shoals	53	27	40	-6	2.42	3		45.08	+14.11	86	3504	+42
Stendal	53	31	43	-3	2.97	3		48.51	+17.98	81	4126	+387
Vincennes_5NE	56	30	41	-4	2.75	4	44	39.88	+11.45	91	3826	+258
South Central(8)								İ				
Leavenworth	52	30	41	-5	1.42	3		50.55	+19.38	102	3648	+210
Oolitic	53	29	40	-5	1.74	3	43	36.95	+7.26	89	3281	-4
Tell_City	56	34	43	-5	1.12	2			+20.80	80	4043	+171
Southeast (9)								İ				
Brookville	54	30	41	-2	1.29	3		35.49	+7.12	75	3401	+297
Greensburg	50	29	40	-4	1.23	2		38.13	+9.43		3476	+286
Scottsburg	53	28	40	-5	1.37	3		41.08	+11.83			

DFN = Departure From Normal (Using 1961-90 Normals Period).

GDD = Growing Degree Days.

Precipitation (Rainfall or melted snow/ice) in inches.

Precipitation Days = Days with precip of .01 inch or more.

Air Temperatures in Degrees Fahrenheit.

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Asian Soybean Rust (Continued)

Since late September, when the dispersal model predicted spores were being transported north from the Delta area, rust has been found in 26 counties in Arkansas, 17 in Tennessee, 18 in Kentucky, 4 in Missouri, and 8 in Illinois, in addition to the 6 counties in Indiana. The timing of discoveries of rust in the mid South and Midwest indicates that all of these infections arose from a major dispersal event that originated in Louisiana.

Another scenario for spread of rust from the south would be stepwise progression, in which infections would develop perhaps fewer than 100 miles beyond a spore source. As these infections matured to produce pustules and spores, they would become the source for further short-distance northward spread. If rust spread only in that manner, we would not be concerned with the disease until it was in Tennessee or Kentucky.

The events of this fall suggest that viable spores can move long distances in a short period of time. If rains that scrub spores out the air accompany a long-distance dispersion, rust can appear simultaneously over a large area. If the events of late September 2006 were to occur several weeks earlier in a growing season, we could have a major outbreak of rust when the crop is still vulnerable.

We have also learned how difficult it is to detect rust at very low incidence. To make timely fungicide applications we need to detect rust when it first appears. It required as long as 3 hours to examine each sample of leaflets. The entire lower surface of each leaflet was examined through a dissecting microscope. This microscope provides excellent magnification, but at a cost of being able to look at only a small area of leaf in each view. These leaf samples collected late in the season may have been more difficult to examine compared to collections during the summer because there were many brown spot, frogeye leaf spot, and downy mildew lesions, as well as minor wounds. Most leaves were losing chlorophyll. But even earlier in the season, these foliar diseases are present and can make it difficult to find a single, small rust pustule.

This summer and last, weather was dry in much of the South. This may be why rust spread so slowly there until late in the season, until weather became more favorable. If next year or in any future year, the summer is wetter in the South, rust may develop more rapidly there than it has done so far. The events of September and October of 2006 suggest that if that happens, and rust is present in Mississippi, Louisiana, and east Texas, the eastern Corn Belt states could be at risk for soybean rust.

For more information on soybean rust, visit the Purdue Plant and Pest Diagnostic Lab Web site at http://www.ppdl.purdue.edu/PPDL/soybean_rust.html or call the Purdue soybean rust hotline at (866) 458-RUST (7878).

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